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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,339	10/31/2001	Varda Treibach-Heck	Call-Tell FX	5246

7590

07/31/2006

Varda Treibach heck
843 Lakeshore Drive
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EXAMINER

MURPHY, DILLON J

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/003,339		TREIBACH-HECK ET AL.	
	Examiner		Art Unit	
	Dillon J. Murphy		2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1-9, and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This action is responsive to the amendment filed on June 27, 2006.
- Claims 1-13 are pending. Claims 1, 10, and 11 have been amended.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 27, 2006 has been entered.

Allowable Subject Matter

Claim 10 is allowed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang (US 5416849).

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Regarding claim 1, teaches a method for collecting reports of at least one parameter (col 2, ln 18-20, form processing) comprising the following steps:

All in a central computer system (col 4, ln 62- col 5, ln 14, wherein intelligent form processor #25 of fig 5, wherein processing may be centralized or split into modules):

Automatically (col 4, ln 50-53, automate processes) receiving from any of a plurality of arbitrary senders, via a publicly accessible transmission channel (col 10, ln 1-9, fax and telephone line), an electronic representation of an image of a physical form generated by a standard, conventional image-conversion device, the form having a plurality of data fields (fig 2c showing form example), each corresponding to an indicator, which may be alphanumeric, of at least a partial value of at least one of the parameters (col 7, ln 8-15, form comprises alphanumeric indicators and parameters);

Automatically and uniquely identifying the physical form from the electronic representation of its received image (col 11, ln 43-54, after template is selected, each electronic representation is automatically identified);

Automatically identifying the location of the data fields in the received representation of the image of the form by comparing the received electronic representation of the image of the physical form with at least one pre-stored electronic representation of at least one template (col 5, ln 22-36, use layout of received representation of image to compare with pre-stored electronic representation to identify fields);

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Automatically extracting from the identified data fields the at least partial values of the corresponding parameters (col 6, ln 47-50, wherein data from fields are extracted); and

Automatically storing the extracted values in a predetermined format in a memory for subsequent processing (col 7, ln 44-col 8, ln 29, data is extracted and stored in memory as extracted image file #10") as well as the representation of the received physical form as it was received (col 6, ln 37-46, wherein image file of document image #10' is stored in buffer).

Regarding claim 2, which depends from claim 1, Huang teaches a method for collecting reports in which the electronic representation of the image of the physical form is generated using a conventional facsimile machine, whereby the transmission channel is a standard telephone line (col 10, ln 1-9, wherein image may be input using fax via a standard telephone line).

Regarding claim 3, which depends from claim 2, Huang teaches a method for collecting reports further including the step of transferring the stored extracted values to an external recipient via a network, all processing of the physical form after transmission by the sender up to and including transfer to the external recipient via the network thereby taking place automatically (col 10, ln 43-65, wherein extracted values #48 are sent to external recipient #32 along with complete form image #10" over LAN #20 for error correction).

Regarding claim 11, claim 11 recites identical features as claim 1 except claim 11 is a system claim. Thus, arguments similar to that presented above for claim 1 are

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equally applicable to claim 11. Applicant is further directed to intelligent forms processor #25 of fig 5, i.e. a central server, fax and network adapter #320 (also fig 5), i.e. I/O means, and form processing means #25 comprising various sub-modules for form processing, as explained in claim 1.

Claim 12 recites identical features as claim 2 except claim 12 is a system claim. Thus, arguments similar to that presented above for claim 2 are equally applicable to claim 12.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US 5416849) in view of Al-Hussein (US 5809167).

Regarding claim 4, which depends from claim 1, Huang teaches a method for collecting reports comprising, all in a central computer system, automatically receiving the form from a plurality of senders, automatically identifying the physical form, automatically identifying the location of the data fields, automatically extracting values from the identified data fields, and automatically storing the extracted values and the complete received image. Huang does not disclose expressly the method further

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comprising a method in which each data field indicates a quantifiable or itemizable value of a corresponding one of the parameters, further including the additional step of storing the received electronic representation of the image of the physical form in the memory, whereby non-quantifiable and non-itemizable entries by the user onto the physical form are made available for subsequent review. Al-Hussein, however, teaches a method in which each data field indicates a quantifiable or itemizable value of a corresponding one of the parameters, further including the additional step of storing the received electronic representation of the image of the physical form in the memory (Al-Hussein, col 7, ln 44-51, individual characters are extracted from text regions in the page and stored as a text file), whereby non-quantifiable and non-itemizable entries by the user onto the physical form are made available for subsequent review (Al-Hussein, col 10, 46-55, entire image, including non-quantifiable and non-itemizable entries, is stored in memory and associated with text file of extracted information. Upon searching the extracted text, it is possible to bring up non-quantifiable information for subsequent review).

Huang and Al-Hussein are combinable because they are from a similar field of image processing over a network. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of Al-Hussein comprising storing the received image in memory, whereby non-quantifiable and non-itemizable entries by the user onto the physical form are made available for subsequent review with the method of Huang comprising, all in a central computer system, automatically receiving the form from a plurality of senders, automatically identifying the

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physical form, automatically identifying the location of the data fields, automatically extracting values from the identified data fields, and automatically storing the extracted values and the complete received image. The motivation for doing so would have been to reduce the possibility of inadvertently discarding information or misclassifying data. Additionally, the suggestion for doing so was given by Huang in fig 2D, wherein non-quantifiable and non-itemizable entries #45 are stored along with quantifiable and itemizable entries #15, for example, and wherein entries are made available for subsequent review, col 10, ln 52-54, for example. Therefore, it would have been obvious to combine Al-Hussein with Huang to obtain the invention as specified in claim 4.

Regarding claim 5, which depends from claim 1, the combination of Huang and Al-Hussein further teaches a method further including the step of storing recipient-entered annotations in the memory along with the stored extracted values of the respective received form (Al-Hussein, col 10, ln 40-55, entire image, including annotations, is stored in memory along with associated text file of extracted information. Upon searching the extracted text, it is possible to bring up non-quantifiable information for subsequent review. Huang and Al-Hussein are combinable for a similar reason as explained above in the rejection of claim 4).

Claim 13 recites identical features as claim 5 except claim 13 is a system claim. Thus, arguments similar to that presented above for claim 5 are equally applicable to claim 13.

Claims 6, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US 5416849) in view of Shepard (US 4021777).

Regarding claim 6, which depends from claim 1, Huang teaches a method for collecting reports comprising, all in a central computer system, automatically receiving the form from a plurality of senders, automatically identifying the physical form, automatically identifying the location of the data fields, automatically extracting values from the identified data fields, and automatically storing the extracted values and the complete received image. Huang does not disclose expressly a method further comprising associating at least two different physical forms with different senders, and automatically determining the identity of each sender based on the received image of the physical form. Shepard, however, teaches a method comprising associating at least two different physical forms with different senders, and automatically determining the identity of each sender based on the received image of the physical form (Shepard, col 5, ln 16-18, form with ID number is associated with a specific customer. The method as taught by Shepard comprises processing multiple forms from multiple customers without a loss in operating efficiency, as seen in col 8, ln 44-53).

Huang and Shepard are combinable because they are from a similar field of endeavor of form processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of Shepard comprising associating forms with different senders and automatically determining the identity of each sender based on the received image with the method of Huang teaching a method

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for collecting reports comprising, all in a central computer system, automatically receiving the form from a plurality of senders, automatically identifying the physical form, automatically identifying the location of the data fields, automatically extracting values from the identified data fields, and automatically storing the extracted values and the complete received image. The motivation for doing so would have been to organize the system for multiple users and to reduce the burden of classifying from the operator. Therefore, it would have been obvious to combine Shepard with Huang to obtain the invention as specified in claim 6.

Regarding claim 7, which depends from claim 6, the combination of Huang and Shepard teaches a method for collecting reports further comprising:

Storing an electronic representation of a template of each included physical form (Huang, col 11, ln 55-col 12, ln 50, wherein forms are generated and stored in Form Processing Template Definition Program #57A' of fig 5); and

Automatically identifying received forms by performing a best-fit comparison of each received electronic representation of the image of one of the physical forms with the stored electronic representations of the templates (Huang, col 22-36, wherein layout, for example, is used to identify received forms with stored electronic representation. A best-fit comparison is inherently performed, as evidenced by the skew analysis information determined in col 7, ln 26-32, wherein even with skew in received image, a best-fit determination of physical form is determined through comparison).

Regarding claim 9, which depends from claim 1, the combination of Huang and Shepard teaches a method for collecting reports in which:

The electronic representation of the image of the physical form is generated using a conventional facsimile machine (Huang, col 10, ln 1-9, fax machine);

The transmission channel is a standard telephone line (Huang, col 10, ln 1-9, input via fax over telephone line);

At least one of the parameters is time and the physical form is a time sheet (Shepard, col 5, ln 1-13, business form is a conventional time sheet comprising at least one parameter that is time).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US 5416849) in view of Luther et al. (US 5721940), hereafter Huang and Luther.

Regarding claim 8, which depends from claim 1, Huang teaches a method for collecting reports comprising, all in a central computer system, automatically receiving the form from a plurality of senders, automatically identifying the physical form, automatically identifying the location of the data fields, automatically extracting values from the identified data fields, and automatically storing the extracted values and the complete received image. Huang does not disclose expressly a method for collecting reports in which the step of automatically identifying the location of the data fields comprises the following sub-steps: storing an electronic representation of a template of each of a plurality of physical forms; automatically identifying each received form by performing a best-fit comparison of each received electronic representation of the image

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of the corresponding physical form with the stored electronic representations of the templates; automatically registering the received electronic representation of the received physical form image with the best-fit electronic template representation; and matching the data fields in the received electronic representation of the received physical form image with corresponding data fields in the best-fit electronic template representation. Luther, however, teaches a method for collecting reports in which the step of automatically identifying the location of the data fields comprises the following sub-steps:

Storing an electronic representation of a template of each of a plurality of physical forms (Luther, col 4, ln 23-30, wherein templates of each form are included in a form dictionary);

Automatically identifying each received form by performing a best-fit comparison of each received electronic representation of the image of the corresponding physical form with the stored electronic representations of the templates (Luther, col 7, ln 5-20, wherein completed form profile is profile of received form, and completed form profile is compared with a form in the form dictionary. If there is a predetermined level of invariant elements reached, i.e. there is a best match, then the received form is identified to match a template);

Automatically registering the received electronic representation of the received physical form image with the best-fit electronic template representation (Luther, col 7, ln 17-19, wherein received form is registered with best-fit template); and

Matching the data fields in the received electronic representation of the received physical form image with corresponding data fields in the best-fit electronic template representation (Luther, col 5, ln 10-34, wherein the form of fig 4a is scanned in and a form profile is made to characterize the data fields of the blank form in fig 4b. In col 6, ln 48-58, wherein when a completed form is received as shown in fig 6, the completed form is characterized as shown in fig 8a to identify the data fields. To identify the form, the characteristics of the data fields for the blank form and completed form are matched in a best fit manner, col 7, ln 5-13).

Huang and Luther are combinable because they are from a similar field of endeavor of for processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of Luther comprising storing a template for each physical form, identifying each received form by performing a best-fit comparison, registering the received form with the best-fit template, and matching the data fields in the received form with the corresponding data fields in the template with the method of Huang teaching a method for collecting reports comprising, all in a central computer system, automatically receiving the form from a plurality of senders, automatically identifying the physical form, automatically identifying the location of the data fields, automatically extracting values from the identified data fields, and automatically storing the extracted values and the complete received image. The motivation for doing so would have been to reduce the time consumption and cost of data entry and retrieval (Luther, col 2, ln 8-13). Therefore, it would have been obvious to combine Luther with Huang to obtain the invention as specified in claim 8.

Response to Arguments

Applicant's arguments, see Remarks, filed June 27, 2006, with respect to claim 10 have been fully considered and are persuasive. The rejection of claim 10 has been withdrawn.

Applicant's arguments, see Remarks, filed June 27, 2006, with respect to the rejection(s) of claim(s) 1-9 and 11-13 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Huang (US 5416849).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Treibach-Heck et al. references (US 20030160828 and US 2003008966) are cited for teaching form processing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJM



**KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER**